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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/673,612	10/19/2000	Shinsuke Nishida	Q61131	2108
7590	05/17/2005		EXAMINER	
Sughrue Mion Zinn Macpeak & Seas 2100 Pennsylvania Avenue NW Washington, DC 20037-3213				YANG, RYAN R
		ART UNIT		PAPER NUMBER
		2672		

DATE MAILED: 05/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/673,612	NISHIDA, SHINSUKE	
	<b>Examiner</b> Ryan R Yang	<b>Art Unit</b> 2672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 09 November 2004.
- 2a) This action is **FINAL**.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-4 and 7-11 is/are rejected.
- 7) Claim(s) 5-6 and 12-29 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	6) <input type="checkbox"/> Other: _____

## **DETAILED ACTION**

1. This action is responsive to communications: Amendment, filed on 11/9/2004. This action is non-final.
2. Claims 1-29 are pending in this application. Claims 1, 2 and 7 are independent claims. In the Amendment, filed on 11/9/2004, claim 7 was amended.
3. This application claims foreign priority dated 2/19/1999.
4. The present title of the invention is "Font memory and font data reading method" as filed originally.

### ***Claim Rejections - 35 USC § 102***

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
6. Claims 2 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Igarashi (5,740,462).

As per claim 2, Igarashi discloses a font memory in which a plurality of groups of font data having different resolutions and represented by a dot pattern are stored for respective character codes, comprising:

a plurality of first input terminals for input of character specifying address signals that specify the font data corresponding to a character code (Figure 1-120 is the input terminals and Figure 2 is a font table with specifying data);

a plurality of first output terminals through which the font data in accordance with the input of said first input terminals is output (Figure 1- 121 is image signal representing a font); and

a plurality of second output terminals through which resolution level signals representing a resolution level of the font data are output (Figure 1- 122 is control signal to form an image having a designated resolution),

the resolution level is sequentially altered at a predetermined timing and, in addition to font data corresponding to the character code spelled by the character specifying address signals and corresponding to the resolution level being output from said first output terminals, resolution signals representing the resolution level are output from said second output terminals (Figure 5, the feedback loop through S522 decrease register by 1, provides sequential altering the font resolution; Figure 6 shows the result. It is noted that Igarashi does not explicitly disclose "a predetermined timing", however, since each of the processing block takes a predetermined amount of time to process, it is inherent that the feedback loop takes a predetermined timing).

7. As per claim 7, Igarashi discloses a font data reading method, comprising:

inputting to a font storage medium character specifying address signals for specifying font data corresponding to the character codes a ("Figure 2- 205 is an address specifying a font) and

inputting to the font storage medium resolution level signals specifying a resolution level of the font data (Figure 2- item 203 is for storing a basic resolution, an area 204 (203 is a typographical error) for setting the dot number (size) of a dot font

character, and an area 205 for setting the actual address of a font", column 3, line 64-66; Figure 2 is the font management table of Figure 1, item 107) and

outputting from the font storage medium font data corresponding to the character codes specified by the character specifying address signals and corresponding to a resolution level specified by the resolution level signals (Figure 6; although Igarashi does not explicitly disclose the steps of inputting and outputting, however, since Igarashi's invention is an output apparatus of stored font information, and since Figure 1 discloses input (111, 120) and output (105) terminals, it is inherent the font storage medium receives instructions and outputs required data),

wherein on said font storage medium is stored a plurality of groups of font data having different resolutions and represented by a dot pattern for respective character codes (Figure 2 is a font table storing a plurality of font data having different resolutions, and "an area 204 for setting the dot number (size) of a dot font character", column 3, line 64-65).

#### ***Claim Rejections - 35 USC § 103***

8. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Igarashi (5,740,462).

As per claim 1, Igarashi discloses a font memory in which a plurality of groups of font data having different resolutions and represented by a dot pattern are stored for respective character codes, comprising:

a plurality of first input terminals for input of character specifying address signals that specify the font data corresponding to a character code (Figure 2- 205 is an address specifying a font and Figure 1-120 is the input terminals);

a plurality of second input terminals for input of resolution level signals that specify resolution levels of the font data (Figure 2- 203 is the basic resolution and Figure 1-120 is the input terminals. It is noted that Igarashi does not explicitly disclose having separate first input terminals and second input terminals, however, since input 120 specifies image of a character and resolution of the image (column 2, line 41-44), it is a matter of designer's choice to have either one terminal or two terminals and would have been obvious to one of ordinary skill in the art at the time the invention was made to make such choice in order to accomplish the same tasks); and

a plurality of output terminals through which the font data in accordance with the input of said first input terminals and said second input terminals is output (Figure 1- 121 is image signal and 122 is control signal of output), wherein,

based on character specifying address signals input from said first input terminals and resolution level signals input from said second input terminals, font data that corresponds to the character codes specified by the character specifying address signals and corresponds to the resolution levels is output from the specified by the resolution output terminals (Figure 1- 105 is output terminal, 121 is image signal and 122 is control signal to form an image having a designated resolution (column 2, line 42- 46)).

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9. Claims 3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Igarashi (5,740,462) in view Suzuki et al. (JP PN 410290367).

As per claims 3 and 8, Igarashi demonstrated all the elements as applied to the rejection of independent claim 1 and 2, supra, respectively, and further discloses a plurality of density level output terminals through which density level signals specifying density levels when the dot patterns are displayed is output ((Figure 1- 105 is output terminal, 121 is image signal and 122 is control signal to form an image having a designated resolution (column 2, line 42-46)).

Igarashi discloses a font memory for storing a plurality of font data with different resolution. It is noted that Igarashi does not explicitly disclose "based on the number of dots in the dot pattern, a density level is calculated when the dot pattern is displayed and density level signals specifying the calculated density level are output from said density level output terminals", however, this is known in the art as taught by Suzuki et al., hereinafter Suzuki. Suzuki discloses an image processor in which a pixel calculation unit calculates an output density of the subpixel of an input image signal based on the dot pattern (Solution of Abstract).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Suzuki into Igarashi because Igarashi disclose a font memory for storing a plurality of font data with different resolution and Suzuki discloses the density of the output image could be obtained in order to find a better match of the image to the screen.

10. Claims 4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Igarashi (5,740,462).

As per claims 4 and 9, Igarashi demonstrated all the elements as applied to the rejection of claims 1 and 2, *supra*, respectively, and further discloses

an exclusive address is given to each dot forming the dot pattern and the font data is information representing the dot pattern using the address exclusive to a particular dot (Figure 2, item 205 is the address exclusive for the dot font).

11. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Igarashi (5,740,462) in view of Suzuki et al. (JP PN 410290367).

As per claims 10 and 11, Igarashi demonstrated all the elements as applied to the rejection of claims 3 and 8, *supra*, respectively, and further discloses

an exclusive address is given to each dot forming the dot pattern and the font data is information representing the dot pattern using the address exclusive to a particular dot (Figure 2, item 205 is the address exclusive for the dot font).

#### ***Allowable Subject Matter***

12. Claims 5-6 and 12-29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

As per claims 5-6 and 12-29, the closest prior art by Igarashi, Suzuki or Ogino do not explicitly disclose the claimed limitations.

***Response to Arguments***

13. Applicant's arguments filed 11/9/2004 have been fully considered but they are not persuasive.

As per claim 1, applicant alleges Igarashi's invention is not a "font memory" as claimed. In reply, examiner considers the "font memory" is defined by the comprised elements, therefore, Igarashi teaching meets the claimed limitations.

Applicant's arguments with respect to claims 2, 4 and 9-11 have been considered but are moot in view of the new ground(s) of rejection.

As per claim 7, examiner considers Igarashi still meets the claimed limitations in the re-written form.

As per claims 3 and 8, applicant hinges his arguments on Igarashi does not meet claim 1 "font memory" limitation. However, since the examiner considers Igarashi meets the claim 1 limitation, the arguments are moot.

***Conclusion***

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan R Yang whose telephone number is (571) 272-7666. The examiner can normally be reached on M-F 9:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on (571) 272-7664. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ryan Yang  
May 13, 2005